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D. Saunders

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1644

Title
METHOD FOR SCREENING FOR PROTEIN
INHIBITORS AND ACTIVATORS

Inventor(s)
Gerard M. HOUSEY

Assistant Commissioner
for Patents
Washington D.C. 20231

SIR:

Applicant refers to the Notice of Draftsperson's Patent Drawing Review attached to Paper Number 11 in the above-referenced patent application and submits herewith twenty two (22) sheets of formal drawings to be substituted for the drawings which were previously submitted in the application. Of the 22 sheets, five (5) sheets are photographs.

The Commissioner is hereby authorized to charge any fees which may be required in connection with this communication to Deposit Account No. 11-0600.

Dated:

June 6, 2001

By:

Lawrence P. Casson, Reg. No. 46,606

KENYON & KENYON
One Broadway
New York, N.Y. 10004
(212) 425-7200 (telephone)
(212) 425-5288 (facsimile)

FIG. 1.A. - 1

	10	20	30	40	50	60
	*	*	*	*	*	*
GAA TTC CGC CTC TCC GGG CTT ACA GCC CGC GGT CCC GCC GCC CCG GGG CCG CCA CCT CTC						
	70	80	90	100	110	120
	*	*	*	*	*	*
GGG GCT CCC CCC AGT CCC CGC GCG CGC AAG ATG GCT GAC CCG GCT GCG GGG CCG CCG CCG						
Met Ala Asp Pro Ala Ala Gly Pro Pro Pro						
	130	140	150	160	170	180
	*	*	*	*	*	*
AGC GAG GGC GAG GAG AGC ACG GTG CCG TTC GCC CGC AAA GGG CCC CTC CCG CAG AAG AAC						
Ser Glu Gly Glu Glu Ser Thr Val Arg Phe Ala Arg Lys Gly Pro Leu Arg Gln Lys Asn						

FIG. 1.A. - 2

190	200	210	220	230	240
*	*	*	*	*	*
GTG CAC GAG GTG AAG AAC CAC AAA TTC ACC GCC CGC TTC TTC AAG CAG CCC ACC TTC TGC					
Val His Glu Val Lys Asn His Lys Phe Thr Ala Arg Phe Phe Lys Gln Pro Thr Phe Cys					
250	260	270	280	290	300
*	*	*	*	*	*
AGC CAC TGC ACC GAC TTC ATT TGG GGC TTC GGG AAG CAG GGA TTC CAG TGT CAA GTC TGC					
Ser His Cys Thr Asp Phe Ile Trp Gly Phe Gly Lys Gln Gly Phe Gln Cys Gln Val Cys					
310	320	330	340	350	360
*	*	*	*	*	*
TGC TTT GTT GTA CAC AAG CGC TGC CAT GAA TTC GTC ACG TTC TCC TGC CCT GGT GCA GAC					
Cys Phe Val Val His Lys Arg Cys His Glu Phe Val Thr Phe Ser Cys Pro Gly Ala Asp					

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FIG. 1.A. - 3

	370	380	390	400	410	420
	*	*	*	*	*	*
AAG GGC CCG GCC TCT GAT GAC CCA CGG AGC AAA CAC AAG TTT AAG ATC CAC ACC TAC TCC						
Lys Gly Pro Ala Ser Asp Asp Pro Arg Ser Lys His Lys Phe Lys Ile His Thr Tyr Ser						
	430	440	450	460	470	480
	*	*	*	*	*	*
AGC CCT ACC TTC TGT GAC CAC TGT GGA TCA CTG CTG TAT GGG CTC ATC CAC CAG GGG ATG						
Ser Pro Thr Phe Cys Asp His Cys Gly Ser Leu Leu Tyr Gly Leu Ile His Gln Gly Met						
	490	500	510	520	530	540
	*	*	*	*	*	*
AAA TGC GAC ACC TGT ATG ATG AAT GTC CAC AAG CGC TGC GTG ATG AAC GTC CCC AGC CTC						
Lys Cys Asp Thr Cys Met Met Asn Val His Lys Arg Cys Val Met Asn Val Pro Ser Leu						

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FIG. 1.A. - 4

	550	560	570	580	590	600
	*	*	*	*	*	*
TGT GGC ACC GAC CAC ACA GAA CGC CGT GGC CGC ATC TAC ATC CAG GCC CAC ATC GAC AGG						
Cys Gly Thr Asp His Thr Glu Arg Arg Gly Arg Ile Tyr Ile Gln Ala His Ile Asp Arg						
	610	620	630	640	650	660
	*	*	*	*	*	*
GAG GTC CTC ATC GTT GTT GTA AGA GAT GCT AAA AAT CTG GTA CCT ATG GAC CCC AAC GGC						
Glu Val Leu Ile Val Val Val Arg Asp Ala Lys Asn Leu Val Pro Met Asp Pro Asn Gly						
	670	680	690	700	710	720
	*	*	*	*	*	*
TTG TCA GAT CCC TAC GTA AAA CTG AAA CTG ATC CCT GAT CCC AAA AGT GAG AGC AAG CAG						
Leu Ser Asp Pro Tyr Val Lys Leu Lys Leu Ile Pro Asp Pro Lys Ser Glu Ser Lys Gln						

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FIG. 1.A. - 5

	730	740	750	760	770	780
	*	*	*	*	*	*
AAG ACC AAG ACT ATC AAA TGC TCC CTC AAC CCG GAG TGG AAC GAA ACC TTC AGA TTT CAG						
Lys Thr Lys Thr Ile Lys Cys Ser Leu Asn Pro Glu Trp Asn Glu Thr Phe Arg Phe Gln						
	790	800	810	820	830	840
	*	*	*	*	*	*
CTG AAG GAA TCA GAC AAA GAC AGA AGA CTG TCC GTA GAG ATC TGG GAT TGG GAC CTG ACC						
Leu Lys Glu Ser Asp Lys Asp Arg Arg Leu Ser Val Glu Ile Trp Asp Trp Asp Leu Thr						
	850	860	870	880	890	900
	*	*	*	*	*	*
AGC AGG AAT GAC TTC ATG GGA TCT CTG TCG TTT GGG ATT TCA GAA CTA CAG AAA GCC GGA						
Ser Arg Asn Asp Phe Met Gly Ser Leu Ser Phe Gly Ile Ser Glu Leu Gln Lys Ala Gly						

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FIG. 1.A. - 6

910	920	930	940	950	960
* GTG GAT GGC TGG TTC AAG TTA CTA AGC CAG GAA GAA GGC GAG TAC TTT AAT GTG CCG GTG	* * * *				
Val Asp Gly Trp Phe Lys Leu Leu Ser Gln Glu Glu Gly Glu Tyr Phe Asn Val Pro Val					
970	980	990	1000	1010	1020
* CCG CCG GAA GAA AGC GAG GGC AAT GAA GAG CTG CCG CAG AAG TTT GAG AGA GCC AAG ATT	* * * *				
Pro Pro Glu Glu Ser Glu Gly Asn Glu Glu Leu Arg Gln Lys Phe Glu Arg Ala Lys Ile					
1030	1040	1050	1060	1070	1080
* GGC CAA GGT ACC AAG GCT CCA GAA GAA AAG ACA GCG AAC ACT ATA TCC AAA TTT GAC AAC	* * * *				
Gly Gln Gly Thr Lys Ala Pro Glu Glu Lys Thr Ala Asn Thr Ile Ser Lys Phe Asp Asn					

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FIG. 1.A. - 7

1090	1100	1110	1120	1130	1140
*	*	*	*	*	*
AAT GGC AAC AGG GAC CGG ATG AAA CTG ACC GAT TTT AAC TTC CTG ATG GTG CTG GGG AAA					
Asn Gly Asn Arg Asp Arg Met Lys Leu Thr Asp Phe Asn Phe Leu Met Val Leu Gly Lys					
1150	1160	1170	1180	1190	1200
*	*	*	*	*	*
GGC AGC TTT GGC AAG GTC ATG CTC TCA GAG CGG AAG GGT ACA GAT GAA CTC TAT GCC GTG					
Gly Ser Phe Gly Lys Val Met Leu Ser Glu Arg Lys Gly Thr Asp Glu Leu Tyr Ala Val					
1210	1220	1230	1240	1250	1260
*	*	*	*	*	*
AAG ATC CTG AAG AAA GAT GTG GTG ATC CAA GAT GAC GAT GTG GAG TGC ACA ATG GTG GAG					
Lys Ile Leu Lys Lys Asp Val Val Ile Gln Asp Asp Asp Val Glu Cys Thr Met Val Glu					

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His Ile Gln Gln Val Gly Arg Phe Lys Glu Phe

Table 1. *Continued*

Study	Year	Age group	Sample size	Prevalence (%)
Wang et al. (1997)	1997	15-64	1000	1.0
Wang et al. (1998)	1998	15-64	1000	1.0
Wang et al. (1999)	1999	15-64	1000	1.0
Wang et al. (2000)	2000	15-64	1000	1.0
Wang et al. (2001)	2001	15-64	1000	1.0
Wang et al. (2002)	2002	15-64	1000	1.0
Wang et al. (2003)	2003	15-64	1000	1.0
Wang et al. (2004)	2004	15-64	1000	1.0
Wang et al. (2005)	2005	15-64	1000	1.0
Wang et al. (2006)	2006	15-64	1000	1.0
Wang et al. (2007)	2007	15-64	1000	1.0
Wang et al. (2008)	2008	15-64	1000	1.0
Wang et al. (2009)	2009	15-64	1000	1.0
Wang et al. (2010)	2010	15-64	1000	1.0
Wang et al. (2011)	2011	15-64	1000	1.0
Wang et al. (2012)	2012	15-64	1000	1.0
Wang et al. (2013)	2013	15-64	1000	1.0
Wang et al. (2014)	2014	15-64	1000	1.0
Wang et al. (2015)	2015	15-64	1000	1.0
Wang et al. (2016)	2016	15-64	1000	1.0
Wang et al. (2017)	2017	15-64	1000	1.0
Wang et al. (2018)	2018	15-64	1000	1.0
Wang et al. (2019)	2019	15-64	1000	1.0
Wang et al. (2020)	2020	15-64	1000	1.0
Wang et al. (2021)	2021	15-64	1000	1.0
Wang et al. (2022)	2022	15-64	1000	1.0
Wang et al. (2023)	2023	15-64	1000	1.0
Wang et al. (2024)	2024	15-64	1000	1.0
Wang et al. (2025)	2025	15-64	1000	1.0
Wang et al. (2026)	2026	15-64	1000	1.0
Wang et al. (2027)	2027	15-64	1000	1.0
Wang et al. (2028)	2028	15-64	1000	1.0
Wang et al. (2029)	2029	15-64	1000	1.0
Wang et al. (2030)	2030	15-64	1000	1.0

FIG. 1.A. - 9

	1450	1460	1470	1480	1490	1500
	*	*	*	*	*	*
GCC ATC GGT CTT TTC TTC TTG CAG AGC AAG GGC ATC ATT TAC CGT GAC CTG AAA CTT GAC						
Ala Ile Gly Leu Phe Phe Leu Gln Ser Lys Gly Ile Ile Tyr Arg Asp Leu Lys Leu Asp						
	1510	1520	1530	1540	1550	1560
*	*	*	*	*	*	*
AAC GTG ATG CTG GAT TCC GAG GGG CAC ATC AAA ATC GCT GAC TTT GGC ATG TGT AAA GAG						
Asn Val Met Leu Asp Ser Glu Gly His Ile Lys Ile Ala Asp Phe Gly Met Cys Lys Glu						
	1570	1580	1590	1600	1610	1620
*	*	*	*	*	*	*
AAT ATC TGG GAT GGG GTG ACA ACC AAG ACA TTC TGT GGC ACT CCA GAC TAC ATT GCC CCA						
Asn Ile Trp Asp Gly Val Thr Thr Lys Thr Phe Cys Gly Thr Pro Asp Tyr Ile Ala Pro						

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FIG. 1.A. - 10

	1630	1640	1650	1660	1670	1680
	*	*	*	*	*	*
GAG ATC ATT GCT TAT CAG CCC TAC GGA AAG TCT GTG GAC TGG TGG GCG TTT GGA GTC CTG						
Glu Ile Ile Ala Tyr Gln Pro Tyr Gly Lys Ser Val Asp Trp Trp Ala Phe Gly Val Leu						
	1690	1700	1710	1720	1730	1740
*	*	*	*	*	*	*
CTG TAT GAA ATG TTG GCT GGC CAG GCA CCT TTT GAA GGG GAG GAT GAG GAT GAA CTC TTC						
Leu Tyr Glu Met Leu Ala Gly Gln Ala Pro Phe Glu Gly Glu Asp Glu Asp Glu Leu Phe						
	1750	1760	1770	1780	1790	1800
*	*	*	*	*	*	*
CAG TCA ATC ATG GAG CAC AAC GTG GCG TAT CCC AAG TCC ATG TCT AAG GAA GCT GTG GCA						
Gln Ser Ile Met Glu His Asn Val Ala Tyr Pro Lys Ser Met Ser Lys Glu Ala Val Ala						

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FIG. 1.A. - 11

1810	1820	1830	1840	1850	1860
*	*	*	*	*	*
ATC TGC AAA GGG CTA ATG ACC AAA CAC CCA GGC AAG CGC CTG GGT TGT GGG CCT GAA GGG					
Ile Cys Lys Gly Leu Met Thr Lys His Pro Gly Lys Arg Leu Gly Cys Gly Pro Glu Gly					
1870	1880	1890	1900	1910	1920
*	*	*	*	*	*
GAA CGA GAC ATT AAG GAG CAT GCA TTT TTC CGG TAT ATC GAC TGG GAG AAA CTC GAA CGC					
Glu Arg Asp Ile Lys Glu His Ala Phe Phe Arg Tyr Ile Asp Trp Glu Lys Leu Glu Arg					
1930	1940	1950	1960	1970	1980
*	*	*	*	*	*
AAG GAG ATT CAG CCA CCT TAT AAA CCA AAA GCT AGA GAC AAG CGA GAC ACC TCC AAC TTC					
Lys Glu Ile Gln Pro Pro Tyr Lys Pro Lys Ala Arg Asp Lys Arg Asp Thr Ser Asn Phe					

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FIG. 1.A. - 12

	1990	2000	2010	2020	2030	2040
	*	*	*	*	*	*
GAC AAA GAG TTC ACC AGG CAG CCT GTG GAA CTG ACT CCC ACT GAC AAA CTC TTC ATC ATG						
Asp Lys Glu Phe Thr Arg Gln Pro Val Glu Leu Thr Pro Thr Asp Lys Leu Phe Ile Met						
	2050	2060	2070	2080	2090	2100
	*	*	*	*	*	*
AAC TTG GAC CAA AAT GAA TTT GCT GGC TTC TCG TAT ACT AAC CCA GAG TTT GTC ATT AAT						
Asn Leu Asp Gln Asn Glu Phe Ala Gly Phe Ser Tyr Thr Asn Pro Glu Phe Val Ile Asn						
	2110	2120	2130	2140	2150	2160
	*	*	*	*	*	*
GTG TAG GTG AAT GCA GAT TCC ATC GCT GAG CCT GTG TGT AAG GCT GCA GCG TGA ATG TCT						

Val ---

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FIG. A.1. - 13

2170 2180 2190 2200 2210 2220

* * * * * *

ATT ATC AAT TCC AGT CTT CCA GGA TTC ATG GTG CCT CTG TTG GCA TCC GTC ATG TGG AGA

2230 2240 2250 2260 2270 2280

* * * * * *

GCT TGT CTT AGA GGG CTT TTC TTT GTA TGT ATA GCT TGC TAG TTT GTT TTC TAC ATT TCA

2290 2300 2310 2320 2330 2340

* * * * * *

AAA TGT TTA GTT TAG AAT AAG TGC ATT GCC CAC TGA TAG AGG TAC AAT TTT CCA GAC TTC

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FIG. 1.A. - 14

2350	2360	2370	2380	2390	2400
CAG AAA CTC ATC CAA TGA ACC AAC AGT GTC AAA ACT TAA CTG TGT CCG ATA CCA AAA TGC					
*	*	*	*	*	*
2410	2420	2430	2440	2450	2460
TTC AGT ATT TGT AAT TTT TAA AGT CAG ATG CTG ATG TTC CTG GTC AAA GTT TTT ACA GTT					
*	*	*	*	*	*
2470	2480	2490	2500	2510	2520
ACT CTC GAA TAT CTC CTT TGA ATG CTA CCT AAG CAT GAC CGG TAT TTT TAA AAG TTG TGA					
*	*	*	*	*	*

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FIG. 1:A. - 15

	2530	2540	2550	2560	2570	2580
	*	*	*	*	*	*
GTA AGC TTT GCA GTT ACT GTG AAC TCT TGT CTC TTG GAG GAA CTT TTT GTT TAA GAA TTG						
	2590	2600				
	*	*				
GTA TGA TTA AAC TGA ATT C*						

FIG. 1.
B.

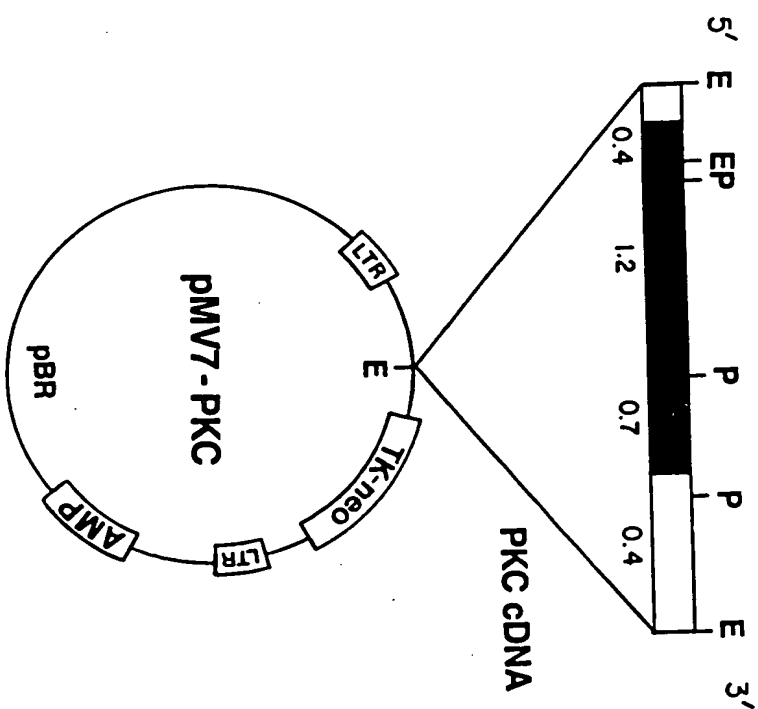
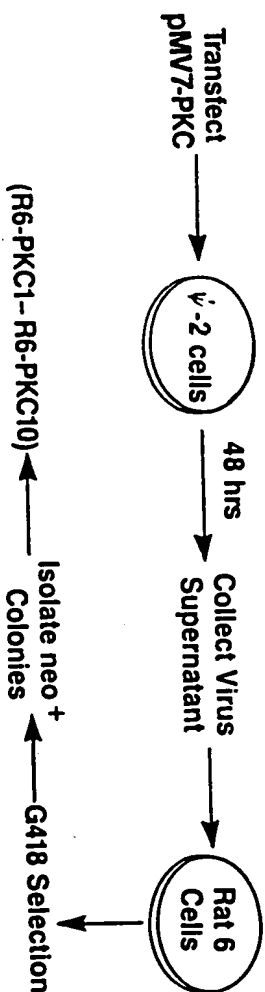


FIG. 1.
C.



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FIG. 2

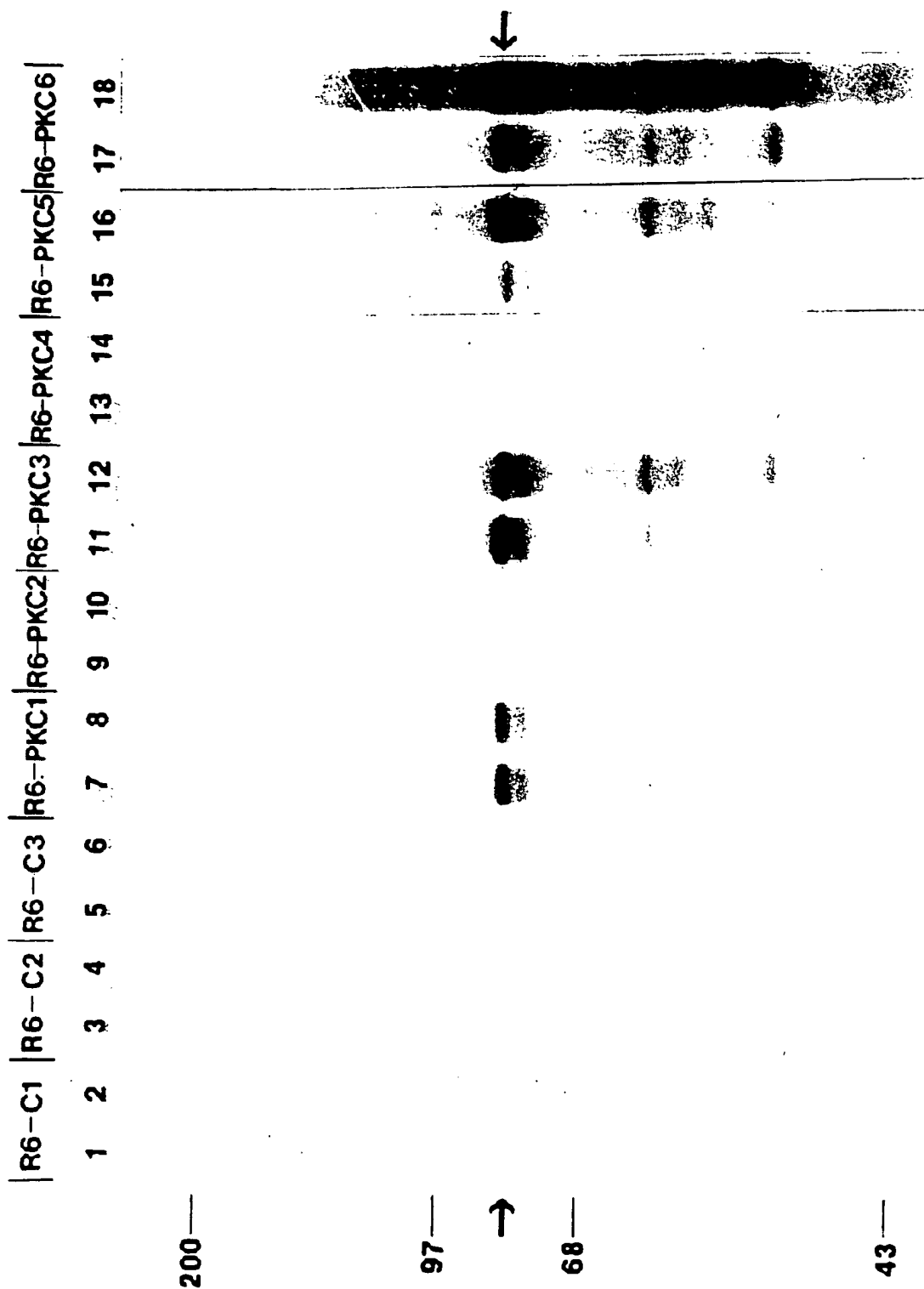


FIG. 3

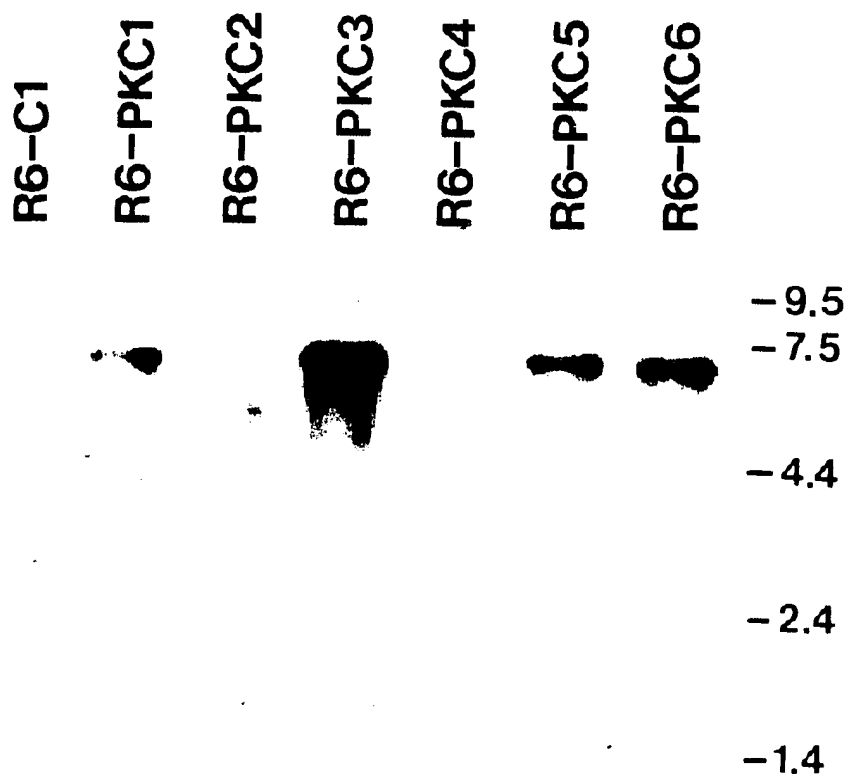


FIG. 4

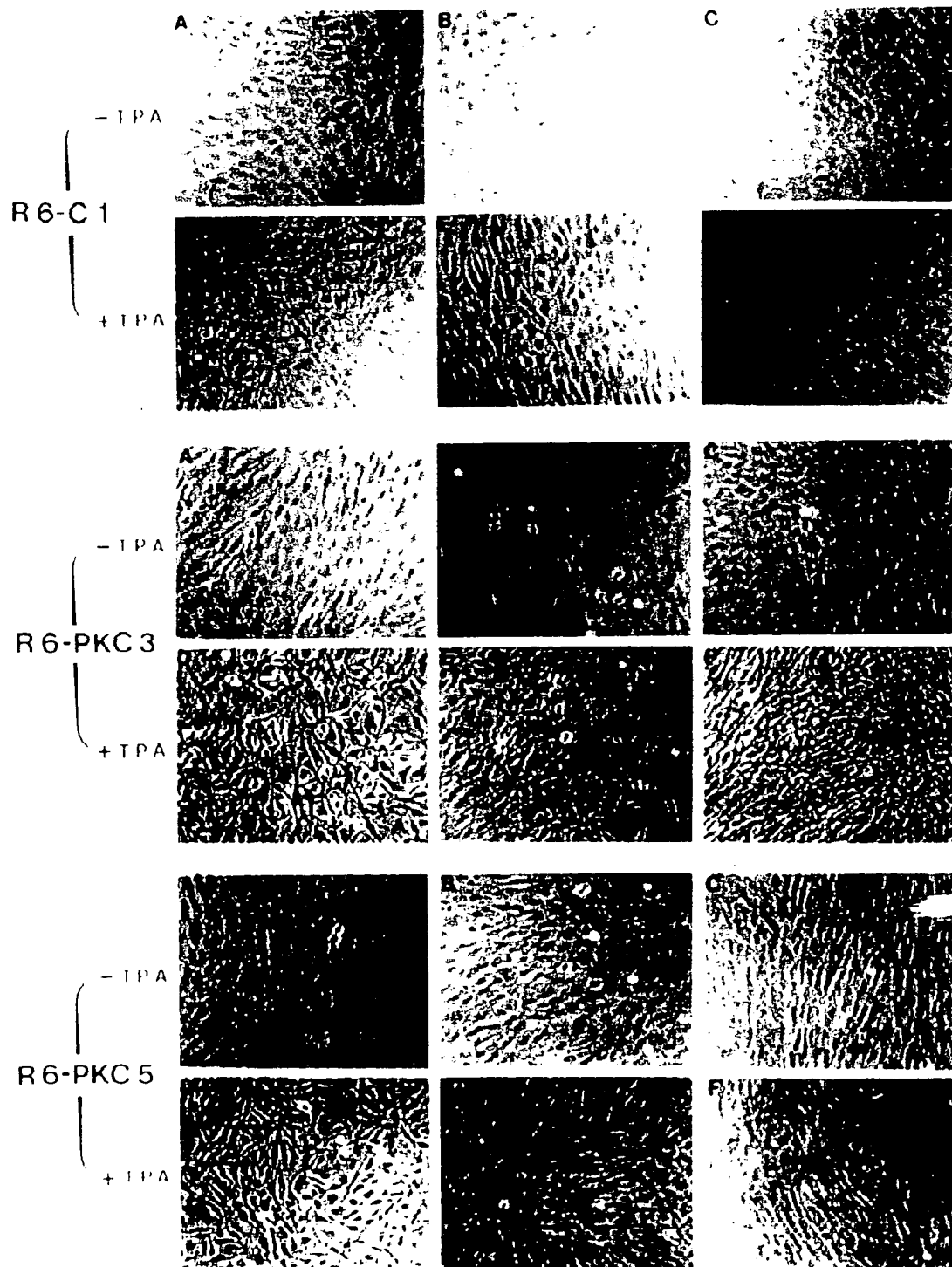


FIG. 5.

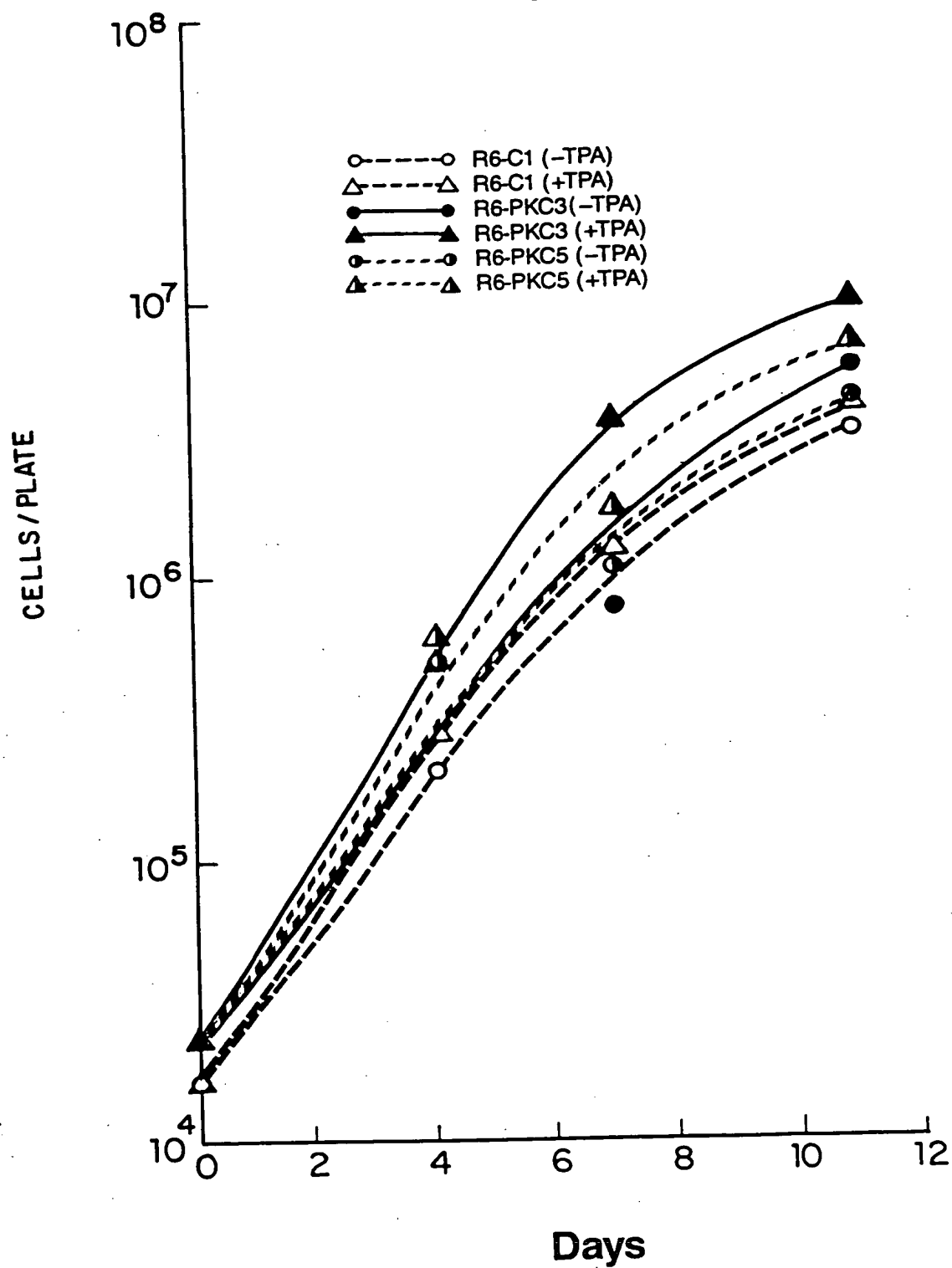
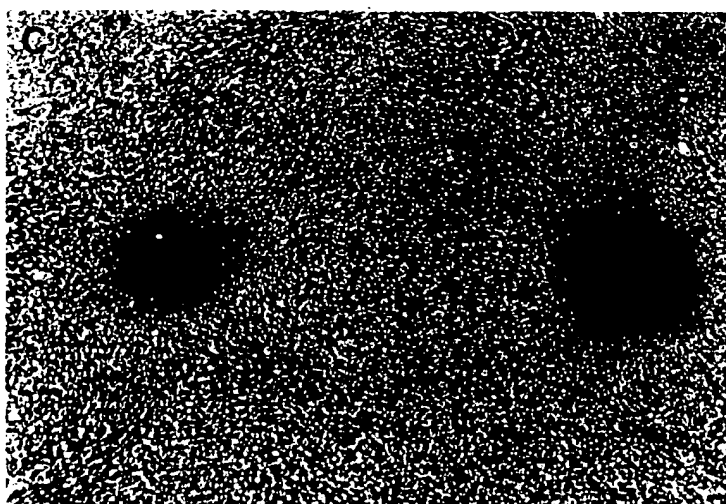
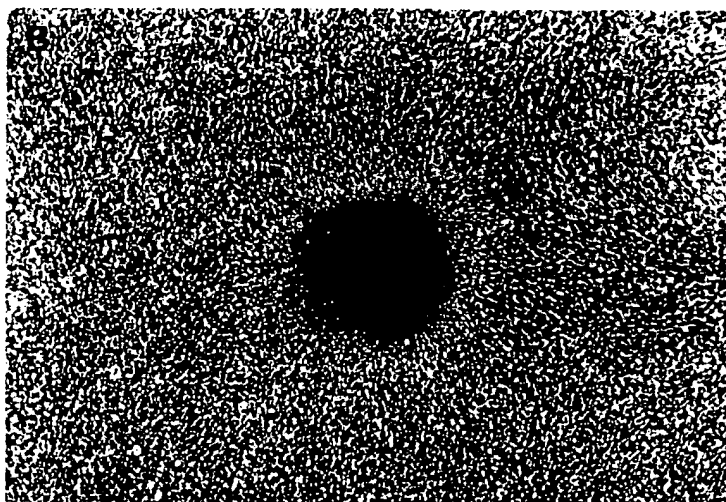
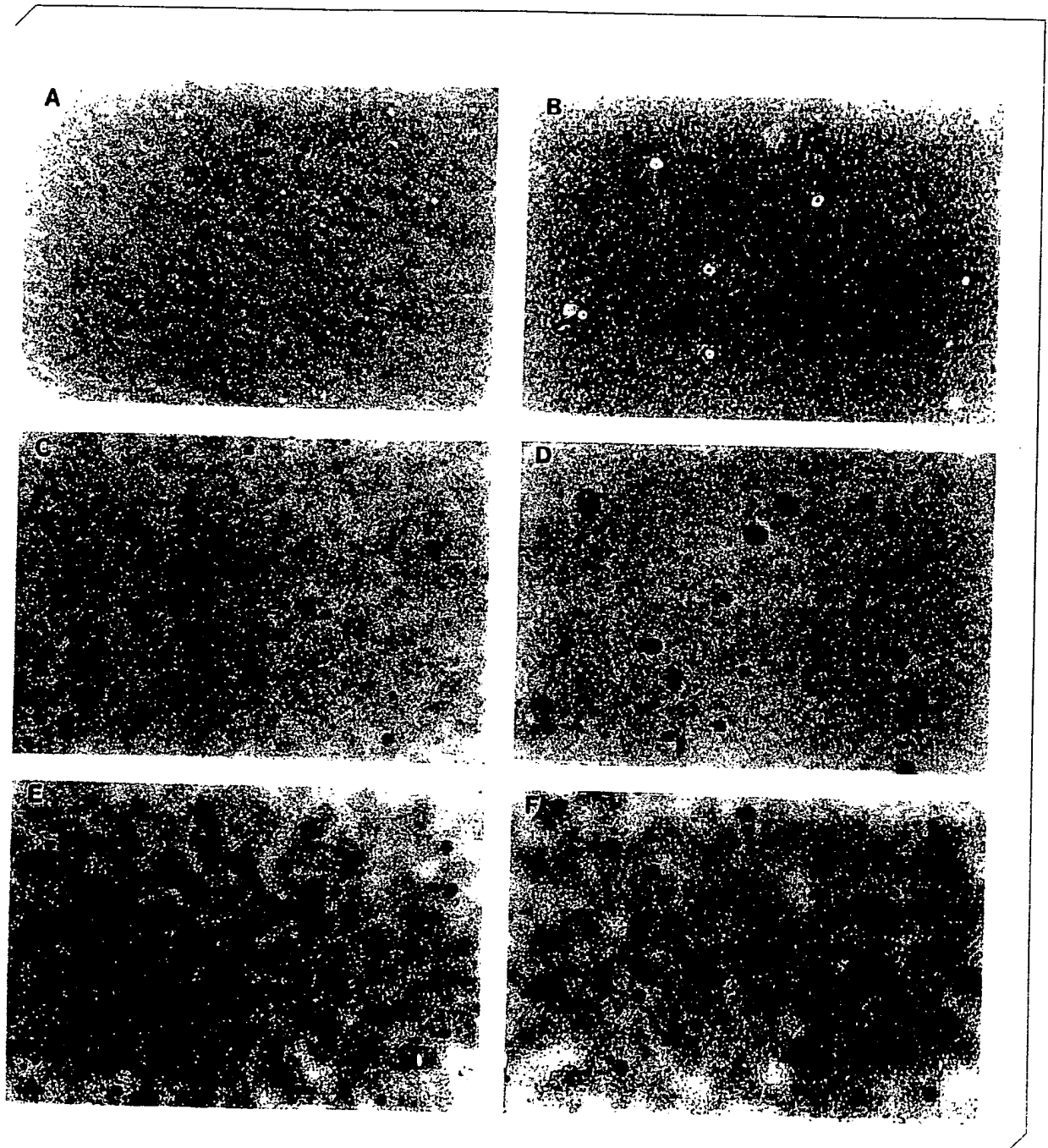


FIG. 6



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FIG. 7



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